

Notice of Allowability

Application No.

10/740,260

Examiner

José A. Fortuna

Applicant(s)

POLAT ET AL.

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/27/07.
2. ☒ The allowed claim(s) is/are 1-4,7-12 and 15-22.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 10/1/07.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/José A Fortuna/
Primary Examiner
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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Brant Cook on October 1, 2007.

The application has been amended as follows:

AMENDMENTS TO THE SPECIFICATION

On page 1, before the "Field of the Invention" heading, the following has been inserted:

--Cross-Reference to Related Applications--

--The present application is a continuation-in-part of U.S. Application No. 10/360,038, filed February 6, 2003, now U.S. Patent No. 7,052,580, and a continuation-in-part of U.S. Application No. 10/360,021, filed February 6, 2003, now U.S. Patent No. 7,067,038.--

AMENDMENTS TO THE CLAIMS

The claims have amended as follows:

Claim 1 (Currently amended) A method for making a fibrous structure, the method comprising the steps of:

providing a mixture of synthetic fibers and short cellulosic fibers onto a forming member
~~comprising a plurality of fluid permeable areas present in a pattern and a plurality of~~

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~~fluid-impermeable areas~~ so as to form one or more layers including the mixture of synthetic fibers and short cellulosic fibers;

providing a plurality of long cellulosic fibers onto the mixture of synthetic fibers and short cellulosic fibers so as to form one or more layers including predominantly long cellulosic fibers to form an embryonic web;

forming a unitary fibrous structure including the one or more layers including the mixture of synthetic fibers and short cellulosic fibers and one or more layers including predominantly long cellulosic fibers from the embryonic web; and

transferring the unitary fibrous structure to a molding member comprising a plurality of fluid-permeable areas present in a pattern and a plurality of fluid-impermeable areas; and

redistributing at least some of the synthetic fibers within the unitary fibrous structure by heating the synthetic fibers within the fluid-permeable areas of the molding member resulting in a pattern of micro-regions of synthetic fibers corresponding to the fluid-permeable areas ~~of synthetic fibers~~ of the molding member.

Claim 2 (Original) The method of Claim 1 wherein the mixture of synthetic fibers and short cellulosic fibers have a fiber length ratio greater than about 1.

Claim 3 (Original) The method of Claim 1, wherein the mixture of synthetic fibers and short cellulosic fibers have a fiber length ratio between about 1 and about 20.

Claim 4 (Original) The method of Claim 1 wherein the mixture of and synthetic fibers

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and short cellulosic fibers has a coarseness value of less than about 50mg/100m.

Claims 5-6 (Cancelled)

Claim 7 (Original) The method of Claim 1, further including the step of impressing the fibrous structure between a molding member and a pressing surface to densify portions of the fibrous structure.

Claim 8 (Original) The method of Claim 1 wherein the forming member is moving at a first velocity and the method further includes the steps of:
providing a second member at a second velocity that is less than the first velocity; and
transferring the embryonic web from the forming member to the second member so as to microcontract the embryonic web.

Claim 9 (Original) The method of Claim 1 wherein the unitary fibrous structure is creped, uncreped or embossed.

Claim 10 (Original) The method of Claim 1 including the further step of providing latex to at least a portion of at least one surface of the unitary fibrous structure.

Claim 11 (Currently amended) A method for making a fibrous structure, the method comprising the steps of:

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providing a mixture of synthetic fibers and short cellulosic fibers onto a forming member comprising a plurality of fluid-permeable areas present in a pattern and a plurality of fluid-impermeable areas, wherein the fluid-permeable areas form a pattern of channels, the mixture provided such that at least some of the synthetic fibers are disposed in the channels;

providing a plurality of long cellulosic fibers onto the mixture of synthetic fibers and short cellulosic fibers such that the long cellulosic fibers are disposed adjacent to the synthetic fibers to form an embryonic web;

forming a unitary fibrous structure from the embryonic web;

transferring the unitary fibrous structure to a molding member comprising a plurality of fluid-permeable areas present in a pattern and a plurality of fluid-impermeable areas, wherein the fluid-permeable areas form a pattern of channels; and

redistributing at least some of the synthetic fibers by heating the synthetic fibers within the fluid-permeable areas of the molding member resulting in a pattern of micro-regions of synthetic fibers corresponding to the fluid-permeable areas of the molding member ~~synthetic fibers; and~~

~~forming a unitary fibrous structure including the synthetic fibers, the short cellulosic fibers and the long cellulosic fibers.~~

Claim 12 (Original) The method of Claim 11 wherein the mixture of synthetic fibers and short cellulosic fibers is provided onto the forming member before the plurality of long cellulosic fibers are provided.

Claims 13-14 (Cancelled)

Claim 15 (Currently amended) The method of Claim 11 further including the step of impressing the fibrous structure between a the molding member and a pressing surface to densify portions of the fibrous structure.

Claim 16 (Original) The method of Claim 11 wherein the forming member is moving at a first velocity and the method further includes the steps of:

providing a second member at a second velocity that is less than the first velocity; and
transferring the embryonic web from the forming member to the second member so as to microcontract the embryonic web.

Claim 17 (Original) The method of Claim 11 wherein the unitary fibrous structure is creped, uncreped or embossed.

Claim 18 (Original) The method of Claim 11 including the further step of providing latex to at least a portion of at least one surface of the unitary fibrous structure.

Claim 19 (Original) The method of Claim 11 wherein the mixture of synthetic fibers and short cellulosic fibers have a fiber length ratio greater than about 1.

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Claim 20 (Original) The method of Claim 11, wherein the mixture of synthetic fibers and short cellulosic fibers have a fiber length ratio between about 1 and about 20.

Claim 21 (Original) The method of Claim 11 wherein the mixture of and synthetic fibers and short cellulosic fibers has a coarseness value of less than about 50mg/100m.

Claim 22 (Currently amended) A method for making a unitary fibrous structure, comprising the steps of:

providing a first aqueous slurry comprising a mixture of synthetic fibers and short cellulosic fibers;

providing a second aqueous slurry comprising a plurality of long cellulosic fibers;

depositing the first and second aqueous slurries onto a forming member comprising a plurality of fluid-permeable areas present in a pattern and a plurality of fluid-

impermeable areas, wherein the fluid-permeable areas form a pattern of channels;

partially dewatering the deposited first and second slurries to form ~~a fibrous an~~ embryonic web comprising the plurality of long cellulosic fibers randomly distributed

throughout at least one layer of the fibrous web and the mixture of synthetic fibers and short cellulosic fibers at least partially non-randomly distributed in the channels;

forming a unitary fibrous structure from the embryonic web;

transferring the unitary fibrous structure to a molding member comprising a plurality of fluid permeable areas present in a pattern and a plurality of fluid impermeable areas,

wherein the fluid-permeable areas form a pattern of channels;

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applying a fluid pressure differential to the unitary fibrous structure ~~web~~ disposed on the molding member, thereby molding the unitary fibrous structure ~~web~~ according to the pattern of channels, wherein the unitary fibrous structure ~~web~~ disposed on the molding member comprises a first plurality of micro-regions corresponding to a plurality of fluid-permeable areas of the molding member and a second plurality of micro-regions corresponding to a plurality of fluid-impermeable areas of the molding member;

redistributing at least some of the synthetic fibers by heating the synthetic fibers within the fluid-permeable areas of the molding member resulting in a pattern of micro-regions of synthetic fibers corresponding to the fluid-permeable areas of molding member; and

transferring the unitary fibrous structure ~~web~~ from the molding member to a drying surface;

~~redistributing at least some of the synthetic fibers; and~~

~~forming the unitary fibrous structure in which the mixture of synthetic fibers and short cellulosic fibers is disposed in a predetermined pattern and the plurality of long cellulosic fibers remain generally randomly distributed throughout at least one layer of the fibrous structure.~~

2. The following is an examiner's statement of reasons for allowance: The closest prior art , Garnier et al., does not teach nor suggest the redistribution of the fibers within the fluid permeable area of the mold to form micro regions of synthetic fibers as it is now claimed. See also applicants' remarks filed on September 27, 2007

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A. Fortuna whose telephone number is 571-272-1188. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/José A Fortuna/
Primary Examiner
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JAF